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Twenty Years of Trauma: Psychological Abstracts 1970 Through 1989

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The present study represents an objective assessment of the growth in trauma literature, and of the thematic trends which have been part of its historical evolution. For these purposes a systematic, manual search of Psychological Abstracts from 1970 to 1990 was conducted to identify literature on trauma-related topics. Fifteen hundred and ninety-six (1596) citations between 1970-1990 were identified, and a trend showing increasing numbers of trauma publications was in evidence. This increase was most apparent in literature involving war- and sexual abuse-related traumatization, but not in publications about natural and technological disaster. These findings reflect a dynamic and growing field, and will provide an important benchmark for assessing the changing status of the PTSD literature.

KEY WORDS: trauma; literature; bibliography; PTSD; publications.

INTRODUCTION

It is generally assumed that the published literature on the effects of trauma has burgeoned since the Vietnam War. It is also widely believed that this growth was stimulated by the formal recognition of Post-Traumatic Stress Disorder (PTSD) as a diagnostic entity in the DSM-III (American Psychiatric Association, 1980). While a number of bibliographies have been published on the trauma-related areas of combat (Fairbank *et al.* 1981; Kol-

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man, 1989; Silver, 1982), rape (Pawliski, 1983), and child sexual abuse (Child Sexual Abuse, 1983), no systematic attempt has been reported that formally assesses the growth in trauma literature, nor have there been any objective and descriptive studies on the thematic trends which have been part of the historical evolution of trauma as an area of systematic inquiry. Such work would be valuable for several reasons. First, it would empirically document the growth in trauma-related studies as a literature base. Second, a content analysis of the evolving literature would provide a historical context by which to better understand the field and from which to make predictions about future work.

The present study represents a careful and objective analysis of the published trauma literature over the past 20 years. Articles on trauma-related topics were identified and reviewed via manual search from *Psychological Abstracts* between 1970 and 1990.

METHOD

Eighteen descriptor words and topic areas, chosen for their applicability over time (e.g., the descriptor category, posttraumatic stress disorder, does not appear in *Psychological Abstracts* until 1985), were employed in the search (Table I). The first criterion for inclusion in the compilation was whether the publication title/abstract described or made reference to “. . . a psychologically distressing event that is outside the range of usual

**Table I. Descriptor Categories
Employed in Literature Search**

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|-----|-------------------------------|
| 1. | Crisis intervention |
| 2. | Crisis intervention services |
| 3. | Emotional disturbance |
| 4. | Emotional trauma |
| 5. | Incest |
| 6. | Natural disasters |
| 7. | Posttraumatic stress disorder |
| 8. | Psychological stress |
| 9. | Rape |
| 10. | Sexual abuse |
| 11. | Sexual deviation |
| 12. | Stress |
| 13. | Stress reactions |
| 14. | Terrorism |
| 15. | Trauma |
| 16. | Trauma neurosis |
| 17. | Victimization |
| 18. | War |
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human experience (i.e., outside the range of such common experiences as simple bereavement, chronic illness, business losses, and marital conflict). The stressor producing this syndrome would be markedly distressing to almost anyone . . . " (p. 247, American Psychiatric Association, 1987). Secondly, the publication had to have theoretical, research, and/or clinical relevance to the human experience of trauma. The search was limited to English-language publications and excluded *Dissertation Abstracts*, analogue research studies (e.g., experiments involving animals, studies involving non-traumatized college students), and reports involving stress resulting from pre and post medical procedures, personal illness, sexual harassment, and phobic states.

All publication titles and most abstracts were read in the initial pass at compiling the trauma literature base. The abstracts for 1672 citations were read by two independent raters who judged their suitability for final inclusion in the literature base. Interrater agreement (agreements/agreements + disagreements) averaged 92.6% (123 total disagreements), with a range of 81% (4 disagreements in 21 articles found in 1972) to 98.04% (3 disagreements in 153 articles found in 1985). Sixty-nine articles were rejected from the base, after both raters judged that they did not meet the study criteria. Seven more articles were rejected during a later content categorization of the articles (see below). The abstracts were next categorized by their titles as being either treatment or assessment/general.

In a separate effort, each article was categorized as belonging to one of twelve content areas: (1) child abuse (including child sexual exploitation and incest), (2) sexual abuse/rape, (3) war/combat, (4) POW/concentration camp survivors, (5) natural disaster, (6) technological disaster, (7) terrorism, (8) homicide (witnessing), (9) combined/mixed trauma, (10) general/miscellaneous trauma (spousal battering, criminal victimization, elder abuse/victimization, animal attacks, rescue worker and police crisis training, child abduction, suicide witnessing, abrupt child/infant death, etc.), (11) trauma theory, and (12) general/unknown category. This content categorization was accomplished by two independent raters, who agreed on the categorization of 1332 articles (interrater agreement = 83.3%). A third rater reviewed all disagreements and judged which category (of the two selected) the article belonged in.

To assess the thematic trends in trauma publications, the content areas were collapsed further across three broad classes labelled sexual/child abuse (including incest), war (war, POW, and terrorism), and disaster (both natural and technological). Year-by-year data from these general categories were examined across the 20 year time span.

RESULTS AND DISCUSSION

Fifteen hundred and ninety six (1596) abstracts cited from 1970 through 1989 were identified. A trend showing increasing numbers of trauma publications across time was in evidence (Fig. 1). The year-by-year data were analyzed using a statistical method for repeated-measures $N = 1$ designs (Mueser et al. 1991; Yarnold, 1988). Briefly, yearly data were converted to ipsative z-scores, from which a 1-lag autocorrelation function [ACF(1)] was derived. For the data reported here, the resulting autocorrelation, or correlation between adjacent years, was high (.93). Next, data from four key year groupings (1970-73, 1976-79, 1982-85, and 1986-89) were identified. These groupings were used to test the statistical significance of the growth in trauma literature pre- versus post-DSM-III (with a two-year intervening period to allow for the literature change to be reflected in the abstracts), and across the 20 years (1970-73 versus 1976-79, 1982-85, and 1986-89). Among the four comparisons, the critical absolute difference (CD = .87), with $p < .05$ for a one-tailed test, was exceeded only in 1976-79 versus 1982-1985 (difference = 1.67), and in 1970-73 versus 1986-89 (difference = 2.28). These findings provide confirmation of a significant literature growth between the years just prior to and after the publication of the DSM-III as well as across the identified twenty year period.

Treatment articles also increased substantially in absolute number, as well as in their proportion to the total trauma literature. For example, there were 20 of 88 (or 22.7%) treatment articles during the years 1970-73, as

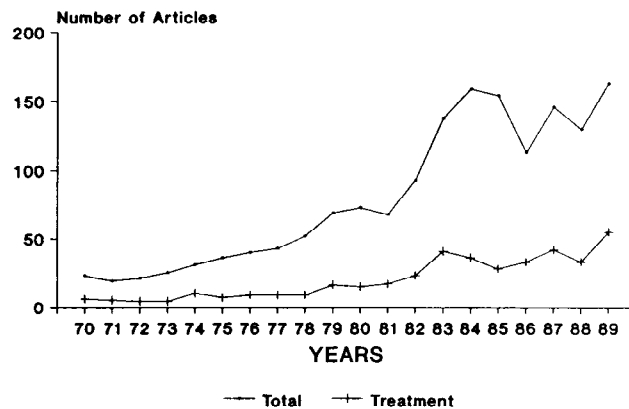
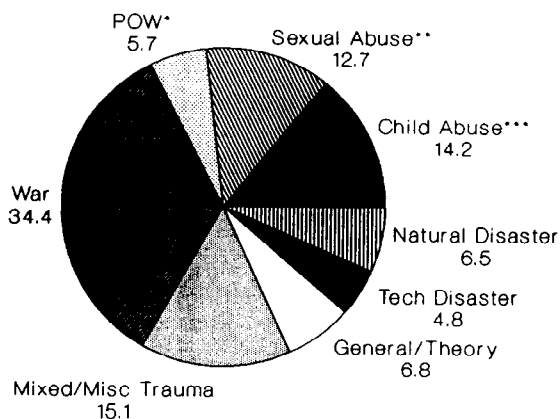


Fig. 1. Yearly trauma publications found in *Psychological Abstracts*, 1970-1989.

opposed to 163 of 557 (29.3%) in 1986-89. Accordingly, a *t*-test calculated between the yearly percentage of treatment articles during the first decade ($M = 22.5\%$, $SD = 5.1$) and the second decade ($M = 25.7\%$, $SD = 4.5$) approached significance ($t = 1.52$; $p = .007$).

As shown in Figure 2, the most citations were found under the categories of war (549, or 34.4% of total), followed by child abuse/incest (226, or 14.2%), and sexual abuse/rape (203, or 12.7%). These three categories comprise over 60% of the trauma publications reviewed in the present study.

The year-by-year data collapsed into sex, war, and disaster categories show clear patterns in the work published in these areas (Fig. 3). First, war-related publications show a steady increase over time. This steady increase may stem in part from the parallel consistency in warfare that has occurred during the period 1970-1989 (e.g., Vietnam, Middle East wars, Falklands crisis, conflict in Northern Ireland, and international terrorism). Also, the effects of earlier, international conflicts (World War II, Korea), and accompanying large-scale imprisonment and torture, have provided a steady contribution years afterwards. On the other hand, the publications on sex-related trauma have undergone a more cyclical pattern, with upsurges seen in 1980, 1984, and 1989. One possible explanation for this fluctuation is that the literature on sex-related trauma may be associated with social and political events outside the scientific community (e.g., publicized



*includes holocaust survivors
 **adult victims only
 ***includes sexual victimization

Fig. 2. Thematic distribution of 1970-1989 trauma publications found in *Psychological Abstracts*.

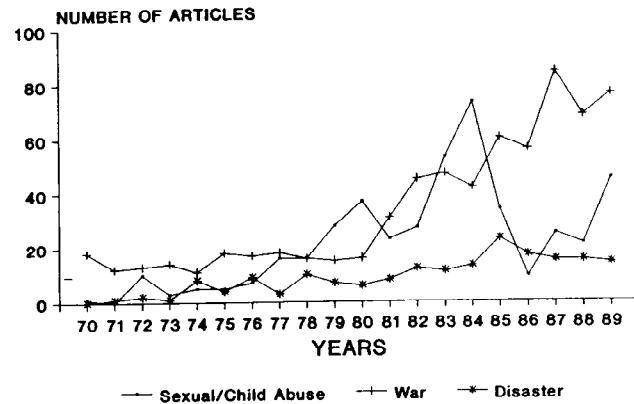


Fig. 3. Trauma publications by type: war, sexual/child abuse, and disaster.

attacks, attention from popular media, heightened public awareness from judicial rulings). Finally, as compared to sexual- and combat-related traumas, disaster literature showed only a modest increase in the past two decades, with a clear leveling-off during the most recent five years. This lack of concomitant growth in the published literature is surprising in light of the potential impact of disasters on the population at large (from vehicular accidents, and natural disasters such as earthquakes, hurricanes, and floods). It seems advisable to devote greater attention to disasters and their consequences. Alternatively, the consequences of disaster relative to those of person-made trauma should be examined to determine why less emphasis has been placed on the former (e.g., the sequelae from disaster may not be as debilitating to the individual or to society).

Several concerns can be raised about real and potential limitations of this study due to our decision to employ a manual instead of a computer search and our selection of *Psychological Abstracts* as a literature base, rather than other, perhaps more inclusive bases, such as Medline. Regarding the first decision, the manual search was selected to systematically sample the literature over time, not to generate an exhaustive bibliography of trauma. A conventional computer search, involving combinations of descriptor terms, would clearly be preferable for the latter purpose. In addition, while the initial literature "pass" might have been conducted using a computerized literature search (identifying all articles listed under a main subheading), a computer would have great difficulty sorting out studies that failed to meet our acceptance criteria (e.g., satisfying PTSD Criterion A and other specific sub-population parameters).

Psychology Abstracts was selected for this study, rather than other literature bases, such as Medline, because it was judged to include the most broad-based psychiatric literature, and was comprised of theoretical, research, and treatment reports. We also felt that the other literature bases might generate too many false positives. To illustrate, a comparison was made between articles listed under the heading "War" in *Psychological Abstracts* 1985 and those cited during the same year in Medline. While Medline produced a substantially larger number of articles (213 as opposed to 97 for *Psychological Abstracts*), a substantially smaller proportion met the first set of inclusionary criteria (50 or 23.4% as compared to 45 or 46.4%). Other Medline categories had even lower hit rates, e.g., "Stress" had only 1 of 292 (.3%) articles meeting the initial review criteria. Clearly, when multiplied over twenty years, the task would have become prohibitively time- and energy-intensive. It is important to recognize, however, that it is likely that a more encompassing and exhaustive review would have been accomplished using another literature base, such as Medline.

The present findings support the widely-held belief about a growing trauma literature, one that has burgeoned since the publication of the DSM-III. This increase is most apparent in literature involving war- and sexual abuse-related traumatization. The data reported here reflect a dynamic and growing field, and will provide an important benchmark for assessing the changing status of the PTSD literature.

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